

*REMARKS/ARGUMENTS**The Present Invention*

The present invention is directed to a composition comprising (A) a T lymphocyte having (i) a recombinant chimeric receptor, which is reactive with a tumor antigen, and (ii) an endogenous T-cell receptor reactive with a cell that is allogeneic to the T lymphocyte, and (B) the cell that is allogeneic to the T lymphocyte, as well as related compositions and methods.

The Pending Claims

Claims 1, 4, 7, 8, 10, 40, 41, 44-46, 52-61, 71, 72, 74-76, 79-87, and 89-93 are pending.

The Office Action

The Office Action rejects claims 1, 8, 40, 41, 45, 46, 52, 56, 58, 61, 71, 72, 75, 76, 79-83, 86, 87, and 90-93 as allegedly anticipated by Clay et al., *J. Immunology* 163: 507-513 (1999) (hereinafter Clay et al.). The Office Action also rejects claims 1, 4, 7, 10, 40, 41, 44, 53-55, 57, 59, 60, 71-74, 79-85, 88, 89, 92, and 93 as allegedly anticipated by Hwu et al., *Cancer Research* 55: 3369-3373 (1995) (hereinafter Hwu et al.). Reconsideration of the rejections is hereby requested.

The Amendments to the Claims

Claims 73 and 88 have been canceled. Claim 72 has been amended to incorporate the features of claim 73. Claim 81 has been amended to incorporate the features of claim 88. Claim 74 has been amended to depend from claim 72, while claim 89 has been amended to depend from claim 81. No new matter has been added by way of these amendments.

*Discussion of the Anticipation Rejections**A. Clay et al.*

The Office Action asserts that claims 1, 8, 40, 41, 45, 46, 52, 56, 58, 61, 71, 72, 75, 76, 79-83, 86, 87, and 90-93 are anticipated by Clay et al., which allegedly discloses a

composition comprising peripheral blood lymphocytes (PBL) transduced with a chimeric receptor reactive with the MART-1 tumor antigen and co-cultured with irradiated allogeneic PBMC and irradiated allogeneic EBV-B cells. This rejection is traversed for the reasons set forth below.

As a first matter, Clay et al. discloses that the PBL were transduced with a retroviral vector comprising the full-length alpha chain of the TCR or the full-length beta chain of the TCR from MART-1-reactive clone 5. See paragraph under subheading "Retroviral vector and supernatant production" in left column of page 508. As such, Clay et al. does not disclose a T lymphocyte comprising a recombinant chimeric receptor. Since claims 1, 8, 40, 41, 45, 46, 52, 56, 58, 61, 71, 79, 80, 83, 86, 87, and 93 require that the recombinant receptor which recognizes the tumor antigen is a recombinant chimeric receptor, Clay et al. does not anticipate these claims.

Furthermore, claims 72 and 81 have been amended to incorporate the features of claims 73 and 88, respectively. The claims now require that the tumor antigen which is recognized by the TCR is an ovarian tumor antigen. Because Clay et al. does not teach a T lymphocyte comprising a receptor reactive with an ovarian tumor antigen, it cannot be said that claims 72 and 81 are anticipated by Clay et al. Moreover, since claims 75, 76, and 82 depend on either claim 72 or 81, it cannot be said that Clay et al. anticipates any of claims 75, 76, and 82.

In view of the foregoing, Clay et al. does not anticipate the pending claims. Applicants therefore request the withdrawal of the rejection.

B. Hwu et al.

The Office Action contends that claims 1, 4, 7, 10, 40, 41, 44, 53-55, 57, 59, 60, 71-74, 79-85, 88, 89, 92, and 93 are anticipated by Hwu et al., which allegedly discloses murine tumor infiltrating lymphocytes (TILs) transduced with a recombinant retroviral vector encoding a chimeric receptor reactive with ovarian adenocarcinoma cells, which transduced TILs were co-cultured with allogeneic MC38 colon tumor cells. The rejection is traversed, since, as stated in the Declaration of Patrick Hwu, which is submitted herewith, the MC38 colon tumor cells were not allogeneic to the murine TILs. Rather, the MC38 colon tumor

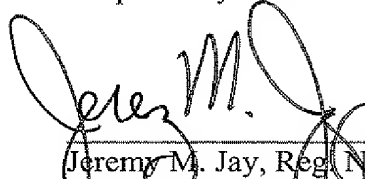
cells were syngeneic to the TILs. Therefore, Hwu et al. cannot be said to anticipate each and every element of the pending claims.

In view of the foregoing, Hwu et al. does not anticipate the instantly pending claims. Applicants therefore request the withdrawal of the rejection.

Conclusion

Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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